



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,245	12/07/2004	Takahiro Miyake	62532(70904)	2894
21874	7590	08/19/2009		
EDWARDS ANGELL PALMER & DODGE LLP			EXAMINER	
P.O. BOX 55874			ORTIZ CRIADO, JORGE L	
BOSTON, MA 02205				
ART UNIT		PAPER NUMBER		
2627				
MAIL DATE		DELIVERY MODE		
08/19/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,245

Applicant(s)

MIYAKE ET AL.

Examiner

JORGE L. ORTIZ CRIADO

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 is/are allowed.
- 6) ☒ Claim(s) 16-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/04/2009 has been entered.

Claim Objections

Claim 16 is objected to because of the following informalities:

In claim 16, first line of the claims "spherical aberration focus offset" should be "spherical aberration and focus offset".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichimura et al. U.S. Patent No. 6,826, 133 in view of either Applicant's admission of prior art, Matsubayashi JP 08-115521 or Yamamoto JP 2000-285485.

Regarding claim 16 and 17, Ichimura et al. discloses a method of correcting a spherical aberration and focus offset of an optical pickup, said method correcting a spherical aberration and a focus offset in an optical system when the pickup projects a collected beam onto a recording surface of an optical storage medium to retrieve recorded information by means of an intensity of reflection from the recording surface, said method being characterized in that it comprises: the step of recording a reference signal on the storage medium; the step of reproducing the recorded information to obtain the reference signal from the reflection; the step of producing a first correction target in the presence of a predetermined second correction target and changing the first correction target using the reference signal, where the first correction target is either one of the focus offset and the spherical aberration, and the second correction target is the other one the optimal first correction target detection step of detecting an occurrence

condition of the first correction target when the first correction target is a minimum; the step of producing the second correction target under an occurrence condition of the minimum first correction target and changing a magnitude of the second correction target; and the optimal second correction target detection step of detecting an occurrence condition of the second correction target when the second correction target is a minimum, wherein the magnitude of the spherical aberration and the magnitude of the focus offset obtained in the first correction target detection step and the optimal second correction target detection step are used to correct the spherical aberration and the focus offset (refers to Figs. 6A 6B and Fig. 7; col. 7, line 65 to col. 8 line 36).

Ichimura et al. does not disclose recording a reference signal on the storage medium in a test write area at a predetermined write power.

However, recording test signals as references having predetermined write power are notoriously known in the art as evidenced by Applicant admission of prior art, depicted in page 4 to page 5 and/or Abstract of Matsubayashi or Yamamoto, to be used as reference signal to correct, focus offset etc. in an optical system.

Therefore, it would have been obvious to one of an ordinary skill in the art at the time of the invention to write a test signal in order to obtain optimum recordable characteristic desired in writable recording media before performing recording operations, as taught by the above references.

Claims 17 and 18 are drawn to the chose alternative language provided in claim 16 of the correction target, respectively and are rejected for the same reasons of obviousness.

Regarding claims, 19 and 20, Ichimura et al. discloses of the use of the maximize amplitude of the reproduced signal as well as of minimize jitter of the same (refer to Fig. 6B; col. 11 lines 9-14).

Regarding claim 22, claim 22 is drawn to the optical pickup that uses the method of claim 16 and is rejected for the same reasons of obviousness as used above, also refer to Fig. 8.

Regarding claim 23, Ichimura et al. further discloses the beam expander of a pair of lenses (28, 29) as shown in Fig. 8.

As per claims 21 and 24, provides for the use of error rate and the use of a liquid crystal panel, the examiner takes Official Notice since these features are well known in the art to be equivalencies, as claimed, respectively.

Allowable Subject Matter

Claims 1-15 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 16-20 and 22-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JORGE L. ORTIZ CRIADO whose telephone number is (571)272-7624. The examiner can normally be reached on Mon.-Fri 10:00 am- 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jorge L Ortiz-Criado/
Primary Examiner, Art Unit 2627